

Appl. No. 10/661,736

Amtd. Dated Mar. 22, 2005

Rcply to Office Action of January 7, 2005

Amendments to the Specification:

Please replace paragraph [0004] with the following amended paragraph:

[0004] Referring to FIG. 7, a conventional backlight system includes a light guide plate 3, two light emitting diodes ~~[[LED]]~~ (LEDs) 1 arranged adjacent to two opposite sides of the light guide plate 3, respectively, and a reflective sheet (not shown). The light guide plate 3 has a dot-pattern on a bottom surface (not shown) thereof, and the reflective sheet is arranged adjacent to the bottom surface of the light guide plate 3.

Please replace paragraph [0006] with the following amended paragraph:

[0006] However, the conventional backlight system has a disadvantage. Each LED 1 emits light beams within a certain emitting angle, thus, light beams are unevenly distributed in the light guide plate 3. In particular ~~Particularly~~, corners 2 of the light guide plate 3 have lower light distribution ~~density~~ densities.

Please replace paragraph [0019] with the following amended paragraph:

[0019] Referring to FIG. 1, a backlight system 10 of a first embodiment in accordance with the present invention comprises a light guide plate 12 and a plurality of point light sources 11. The light guide plate 12 is rectangular in shape, and comprises four incident surfaces 124 at four corners thereof ~~of the light guide plate 12~~, a light exit surface 121, a bottom surface 123 opposite to the exit surface 121, and four side surfaces 122. The light exit surface 121 is perpendicular to the incident surfaces 124 and the side surfaces 122.

Please replace paragraph [0021] with the following amended paragraph:

Appl. No. 10/661,736

Amdt. Dated Mar. 22, 2005

Reply to Office Action of January 7, 2005

[0021] Referring to FIG. 3, the bottom surface 123 has a scattering pattern 14 thereon, corresponding to the lower light intensity distributing area 13, which scattering pattern 14 diffuses light beams incident thereon to make the light intensity emitted from said lower light distributing area 13 more ~~homogenous~~ homogeneous with other areas of the light guide plate 12. The scattering pattern 14 comprises a plurality of dots (not labeled), whose covering rate is determined by the light intensity distribution[[,]]. ~~Therefore~~ therefore, the covering rate is denser the farther away from the ~~emitting-angle~~ incident surfaces 124, and less dense in the vicinity of the ~~emitting-angle~~ incident surfaces 124. This arrangement promotes a more uniform emission of light beams from the light exit surface 121. The dots can be formed in hemispherical, cylindrical, rectangular, cuboidal, or other [[shape]] shapes.

Please replace paragraph [0023] with the following amended paragraph:

[0023] In operation, light beams emitted by each point light source 11 enter into the light guide plate 12 through the corresponding light incident surface 124. The reflective film reflects light beams upwardly to the light exit surface 121. Furthermore, a portion of the light beams [[are]] is diffused by the dots of the scattering pattern 14 on the bottom surface 123, which improves the light emission from the area 13. Subsequently, light beams are transmitted out from the light exit surface uniformly.

Please replace paragraph [0024] with the following amended paragraph:

[0024] Referring to FIGS. 4-5, a backlight system 16 of a second embodiment

Appl. No. 10/661,736

Amdt. Dated Mar. 22, 2005

Reply to Office Action of January 7, 2005

of the present invention is similar to the backlight system 10 of the first embodiment. However, the point light sources 11 may be light emitting diodes (LEDs) with an emitting angle of about 60°, or the like. Therefore, when light beams propagate into the light guide plate 12, there is also a lower light intensity distribution in an area 17 in the light guide plate 12, in which less light exists, just like the area 13 in the light guide plate 10. The bottom surface 123 has a scattering pattern 18 thereon, corresponding to the lower light intensity ~~distributing~~ distribution area 17[~~,~~]. ~~[[which]]~~ The scattering pattern 18 diffuses light beams to promote more ~~homogenous~~ homogeneous emission of the light from the light guide plate 12.